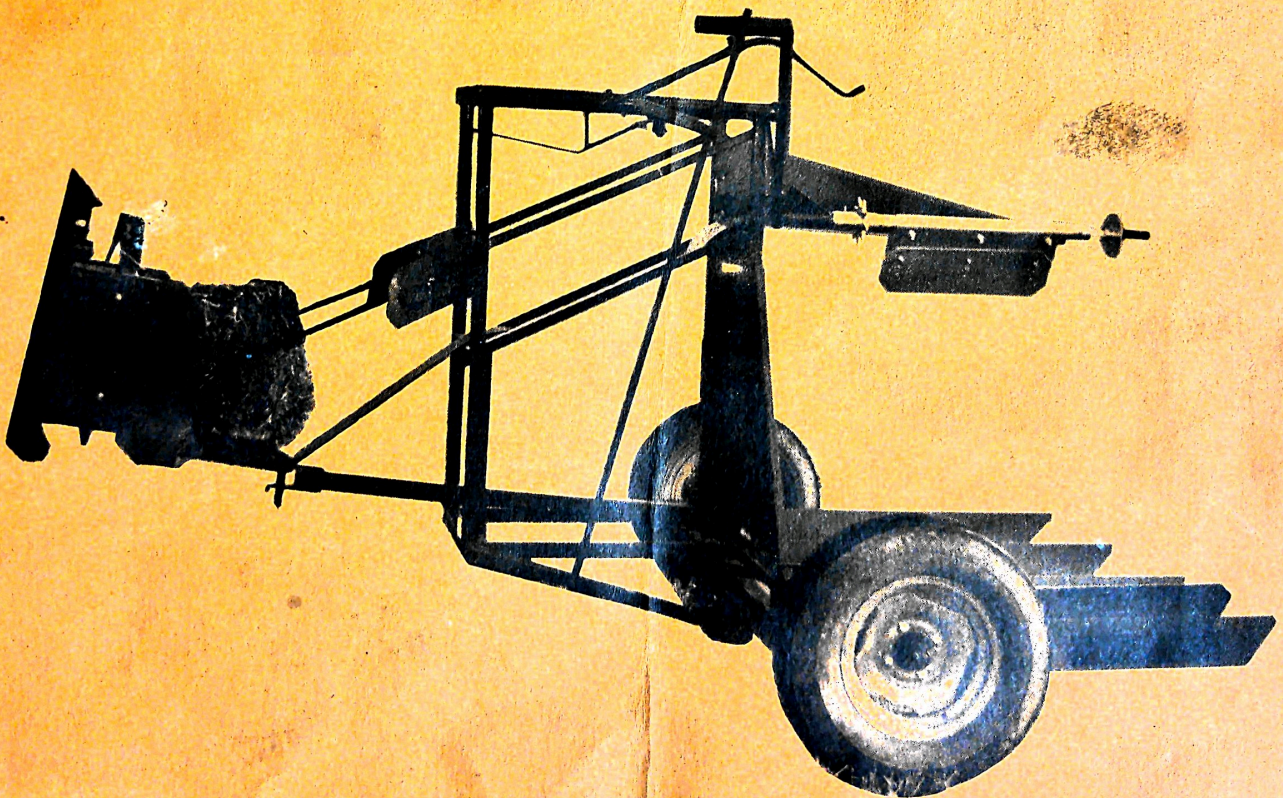


**WILLIAMSON
MODEL 010
AUTOMATIC
SIX-BALE
STOOKER**

**ASSEMBLY
INSTRUCTIONS
AND
OWNERS
MANUAL**



**CAN. PAT NO. 686012
U.S. PAT. NO. 3,135,554
OTHER PAT. PENDING**



WILLIAMSON MODEL 010 AUTOMATIC BALE STOOKER ASSEMBLY PROCEDURE AND SET-UP INSTRUCTIONS

Please study drawings 010-4-0001 and 010-4-0045 carefully and proceed as follows:
Disassemble shipping assembly. Take off wheels, bolt bag, hitch, tongue, trip rod, swinging arm assembly, bale entry guides, bale support guide, bale slide with brace, adjustable trip arm, bale guard, pivot bearings, lug. Do not throw away any bolts, nuts or cotters.

1. Make sure all parts are on hand according to parts list on drawing 010-4-0001, 010-2-0041 and 010-2-0042.
2. Install TIRES and WHEELS onto HUBS of the BALE CARRIER FRAME. Inflate tires 7 to 10 lbs. p.s.i.; low tire pressures give the best performance especially on rough ground.
3. DETERMINE YOUR BALER CHUTE SIZE; 14" x 18" or 16" x 18" and assemble accordingly. Assemble MAIN FRAME item No. 1 to BALE CARRIER FRAME item No. 2 with the PIVOT BEARINGS item No. 9 using 4 - ½" x 4½" long hex. hd. bolts, nuts and lockwashers as shown. Place stub shafts on main frame into lower hole of pivot bearing for 14" x 18" bales and into upper hole for 16" x 18" bales.
4. Assemble LUG item No. 8 to BALE CARRIER FRAME tube using 2 - ½" x 4½" long hex. hd. bolts, nuts and lockwashers as shown.
5. Install BALE GUARD item No. 19 to BALE CARRIER FRAME using 2 - ¾" x 1" long hex. hd. bolts, nuts, flatwashers and lockwashers as shown.
6. Install TRIP LINKAGE item No. 6 with CLEVIS item No. 7 in place as shown on drawing 010-4-0001. Adjust clevis to obtain a length from hole to hole of 31 inches for 14" x 18" bales and 31½ inches for 16" x 18" bales. Finer adjustments may be necessary later. Attach CLEVIS to LUG on BALE CARRIER FRAME with PIN item No. 25 and 3/16" x 1½" long cotter pin. Note adjustment if needed to TRIP LINKAGE as shown on drawing 010-4-0045.
7. Install TONGUE item No. 5 with bolts as listed. Field adjustment will be necessary after attachment to baler to provide the correct angle for the bale carrier frame. See step No. 18.
8. Attach BALE SLIDE item No. 16 with BRACE item No. 17 using bolts, nuts and washers as shown. Leave bolts on brace and bale slide loose for later adjustment.
9. Install assembled SWINGING ARM ASSEMBLY item No. 3. Place machinery bushings item No. 32 where indicated and fasten with ¼" x 2" long cotter pin.
10. Please note that STOP item No. 11 and BALE HOLD DOWN item No. 15 are installed in position for 14" x 18" bales. If using stooker for 16" x 18" bales, readjust accordingly — see drawing 010-4-0045.
11. Install TRIP ROD item No. 18, SHORT SPRING with 'S' hook item No. 27, SPACER BEARING item No. 23, and bolt, nut and washer as shown in Section B-B and Detail 'D' on drawing 010-4-0001.
12. Install ADJUSTABLE TRIP ARM item No. 14 into TOP CROSS ARM item No. 13 and position as shown on drawing. Move top cross arm towards centre line of machine as shown. (See Top View drawing 010-4-0001). Tighten 3 - ½" set screws after positioning. Again note your bale size. (See drawing 010-4-0045).
13. Install LONG SPRING item No. 26 to main frame and swinging arm assembly using 3/16" x 1½" long cotter pins. See Section A on drawing 010-4-0001.
14. Install BALE ENTRY GUIDES R.H. and L.H. items No. 20 and 21 with carriage bolts, nuts and lockwashers as shown.
15. Position rear end of BALE SLIDE to the 21½" dimension shown on drawing 010-4-0045 Top View. Tighten bolts on brace and bale slide.
16. Please note Detail 'C' on drawing 010-4-0045. Make sure your machine conforms to this dimension. If not, then adjust as per Detail 'C' on drawing.

17. Install Hitch WELDMENT item No. 4 to baler chute as shown in drawing 010-4-0045. **Place hitch flush with the top of baler chute.** Drill holes (2) on each side to match existing holes in baler chute and fasten with the $\frac{3}{8}$ " x 1" long carriage bolts provided. (Note: If holes are provided in hitch they may not necessarily match the holes in your baler chute as hole patterns vary greatly with different balers.)

18. Attach tongue to hitch with BALE SUPPORT GUIDE item No. 22 in place and PIN item No. 24 and $\frac{3}{16}$ " x $1\frac{1}{2}$ " long cotter pin as per drawing. Adjust stoker level. Bale carrier tines should be about 3 inches higher at the rear. This adjustment is made by arranging the two bolts in the tongue cage. Check the 35 inch or 37 inch distance between bale carrier tines and bale slide. Adjust if required (Drawing 010-4-0045)

19. Install RUBBER TARP STRAP item No. 31 in (3) places where shown on arrangement drawing 010-4-0001.

20. Adjust angle of BALE DEFLECTOR item No. 2 on drawing 010-3-0041 to the 18 inch dimension given on drawing 010-4-0045. Retighten 3 carriage bolts.

NOTE: Refer to drawing 010-4-0001 for all items listed in above steps except as noted otherwise.

WILLIAMSON AUTOMATIC STOOKERS are guaranteed to work only, and only when all set up and adjustments are made correctly and the BALER be maintained in proper condition, i.e.

- Bales should be minimum length of 36 inches.
- Baler slicing knives should be kept sharp at all times.
- Clearance between slicing knives be set properly.
- Baler speed should be maintained to maximum strokes per minute according to baler manufacturers specification.
- Guide rails in bale chamber and rollers on plunger should be maintained, in order that the plunger is properly adjusted at all times.
- Tension should be set properly that bale tension is not too tight or too loose.

OPERATING TIPS

- Oil the stoker **at all moving parts**, especially pins and bushings at trip linkage, swinging arm pivot shaft and square latch tube in swinging arm with motor oil. Square latch tube in swinging arm must move back and forth freely.) Wheel bearings are packed with grease at factory.
- Adjustments are available for all three springs. If spring pressure needs to be increased, change cotter pin location to different holes. (see drawing 010-4-0001 and 010-3-0041)
- Adjustment is also available on the bale deflector. Bale deflector extension plate item No. 3 drawing 010-3-0041 may be extended if bales are small and swinging arm closes shut after the sixth bale.

WARNING

When starting to bale with an empty bale chamber make sure bales are solid before entering the stoker chamber. First bales coming into the stoker chamber should be carefully watched and guided by hand if necessary to properly enter flow into the stoker. If the bale jams — bottom, top and side guides may be bent on the stoker or shear-pin may be sheared on the baler.

When baler fails to tie do not remove untied bales until they are expelled out at rear of stoker. i.e. always keep continuous line of bales from baler chamber to stoker discharge, otherwise bales may have to be guided into stoker again.

At the beginning of each baling operation make sure bales held between baler and stoker are not shifted or broken as could result from moving from one field to another or from turning too short a radius.

WARRANTY will not apply unless above instructions are followed.

17. Install Hitch WELDMENT item No. 4 to baler chute as shown in drawing 010-4-0045. **Place hitch flush with the top of baler chute.** Drill holes (2) on each side to match existing holes in baler chute and fasten with the $\frac{3}{8}$ " x 1" long carriage bolts provided. (Note: If holes are provided in hitch they may not necessarily match the holes in your baler chute as hole patterns vary greatly with different balers.)

18. Attach tongue to hitch with BALE SUPPORT GUIDE item No. 22 in place and PIN item No. 24 and $\frac{3}{16}$ " x $1\frac{1}{2}$ " long cotter pin as per drawing. Adjust stoker level. Bale carrier tines should be about 3 inches higher at the rear. This adjustment is made by arranging the two bolts in the tongue cage. Check the 35 inch or 37 inch distance between bale carrier tines and bale slide. Adjust if required (Drawing 010-4-0045)

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20. Adjust angle of BALE DEFLECTOR item No. 2 on drawing 010-3-0041 to the 18 inch dimension given on drawing 010-4-0045. Retighten 3 carriage bolts.

NOTE: Refer to drawing 010-4-0001 for all items listed in above steps except as noted otherwise.

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- a. Bales should be minimum length of 36 inches.
- b. Baler slicing knives should be kept sharp at all times.
- c. Clearance between slicing knives be set properly.
- d. Baler speed should be maintained to maximum strokes per minute according to baler manufacturers specification.
- e. Guide rails in bale chamber and rollers on plunger should be maintained, in order that the plunger is properly adjusted at all times.
- f. Tension should be set properly that bale tension is not too tight or too loose.

OPERATING TIPS

1. Oil the stoker **at all moving parts**, especially pins and bushings at trip linkage, swinging arm pivot shaft and square latch tube in swinging arm with motor oil. Square latch tube in swinging arm must move back and forth freely.) Wheel bearings are packed with grease at factory.
2. Adjustments are available for all three springs. If spring pressure needs to be increased, change cotter pin location to different holes. (see drawing 010-4-0001 and 010-3-0041)
3. Adjustment is also available on the bale deflector. Bale deflector extension plate item No. 3 drawing 010-3-0041 may be extended if bales are small and swinging arm closes shut after the sixth bale.

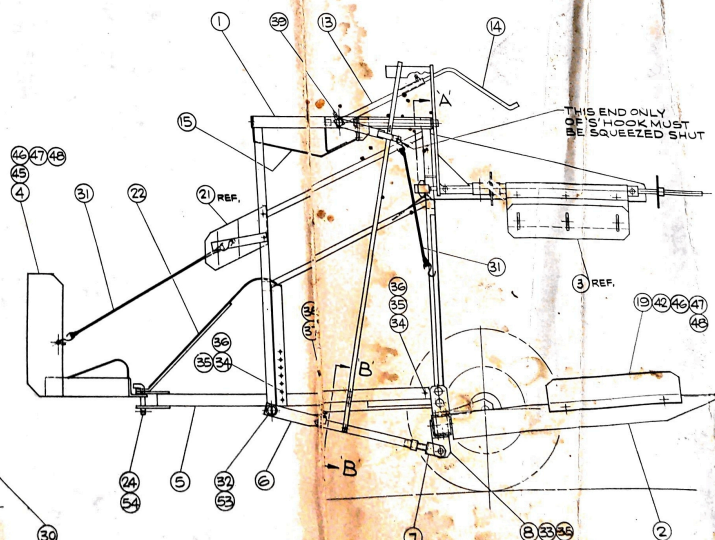
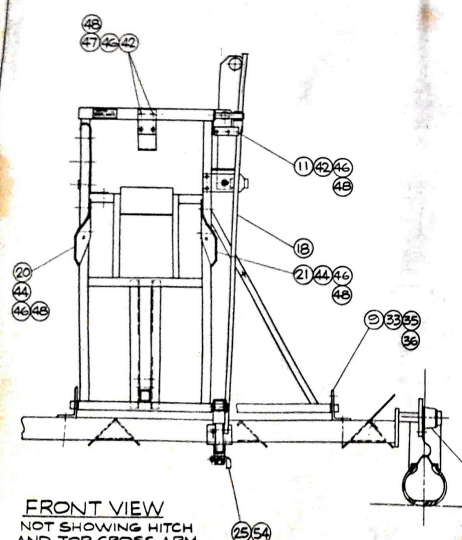
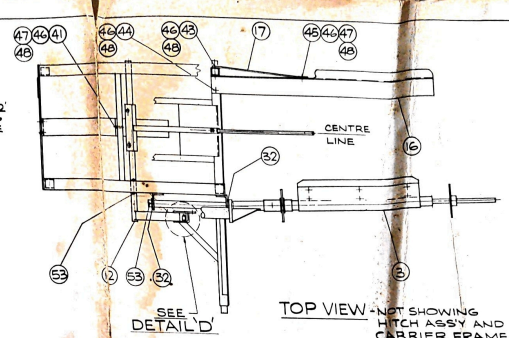
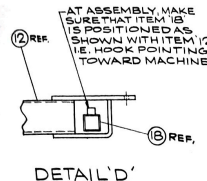
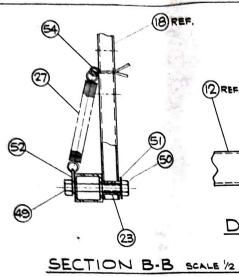
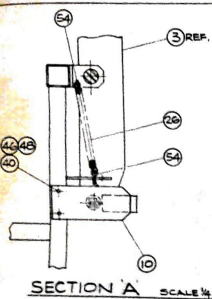
WARNING

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At the beginning of each baling operation make sure bales held between baler and stoker are not shifted or broken as could result from moving from one field to another or from turning too short a radius.

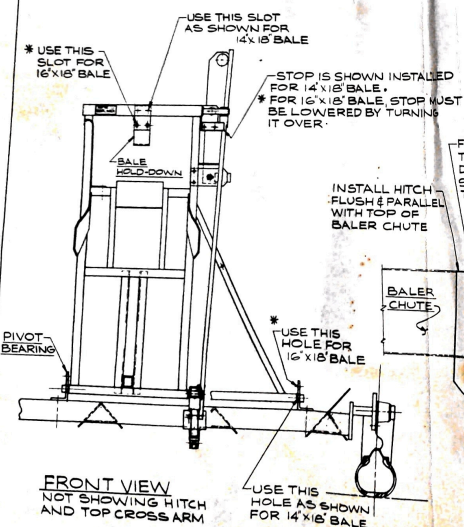
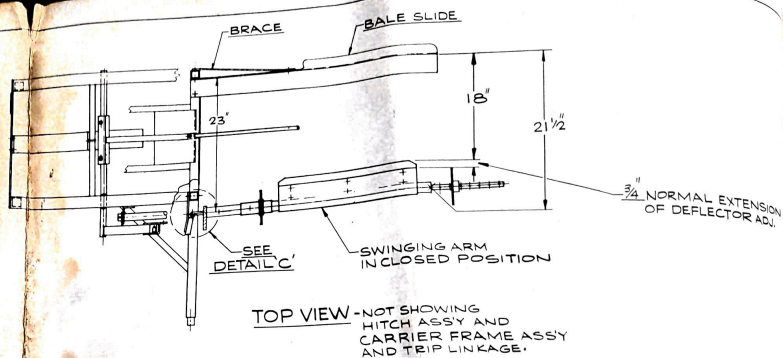
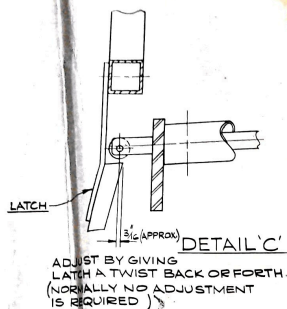
WARRANTY will not apply unless above instructions are followed.



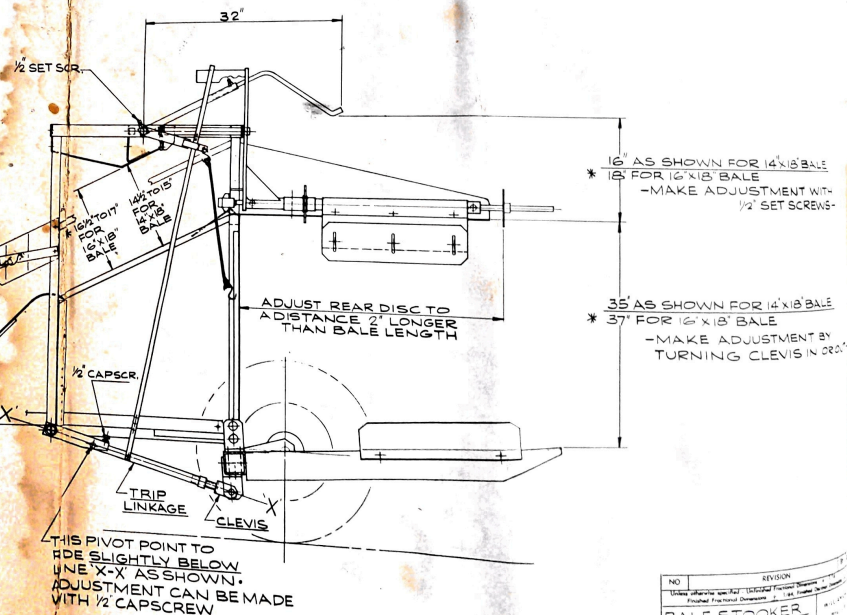
ITEM NO.	PART NO.	DESCRIPTION
1	010-4-0002	MAIN FRAME WELDT.
2	010-4-0003	CARRIER FRAME WELDT.
3	010-3-0041	SWINGING ARM ASSY.
4	010-3-0004	HITCH WELDT.
5	010-2-0014	TONGUE
6	010-3-0013	TRIP LINKAGE
7	010-2-0016	CLEVIS
8	010-2-0011	LUG
9	010-2-0012	PIVOT BEARING
10	010-2-0007	LATCH-SWINGING ARM
11	010-2-0030	STOP
12	010-2-0019	TOP CROSS BAR
13	010-2-0013	TOP CROSS ARM
14	010-2-0031	ADJ. TRIP ARM
15	010-3-0035	BALE HOLD-DOWN
16	010-3-0010	BALE SLIDE
17	010-2-0039	BRACE
18	010-3-0018	TRIP ROD
19	010-2-0025	BALE GUARD
20	010-3-0032	BALE ENTRY GUIDE R.H.
21	010-3-0033	BALE ENTRY GUIDE L.H.
22	010-3-0034	BALE SUPPORT GUIDE
23	010-2-0029	SPACER BEARING
24	010-2-0043	HITCH PIN
25	010-2-0044	CLEVIS PIN
26	010-2-0021	SPRING-SWING ARM
27	010-2-0022	SPRING-TRIP ROD
30	010-2-0042	HUB & WHEEL ASSY.
31	3	RUBBER STRAP 2" X 3" X 10' 000
32	3	MACH. BUSH. 1/4" SHAFT X 1/2" O.D.
33	3	2-1/2" BNC. HEX. HD. BOLT X 4 1/2" LG.
34	3	2-1/2" BNC. HEX. HD. BOLT X 3 1/2" LG.
35	3	2-1/2" BNC. HEX. NUT
36	3	2-1/2" STD. LOCK WASH.
37	1	2-1/2" BNC. HEX. HD. BOLT X 1/2" LG.
38	1	2-1/2" BNC. HEX. JAM NUT
39	3	2-1/2" BNC. SQ. HD. SET SCREW X 1/2" LG.
40	2	2-1/2" BNC. HEX. HD. BOLT X 2 1/2" LG.
41	1	2-1/2" BNC. HEX. HD. BOLT X 1 1/2" LG.
42	6	2-1/2" BNC. HEX. HD. BOLT X 1 1/2" LG.
43	1	2-1/2" BNC. BOLT X 2 1/2" LG.
44	7	2-1/2" BNC. BOLT X 2 1/2" LG.
45	5	2-1/2" BNC. BOLT X 2 1/2" LG.
46	22	3/8" BNC. HEX. NUT
47	10	3/8" STD. FLAT WASH.
48	22	3/8" STD. LOCK WASH.
49	1	5/16" BNC. HEX. HD. BOLT 2 1/2" LG.
50	1	5/16" BNC. HEX. NUT
51	1	5/16" STD. FLAT WASH.
52	1	1/2" HOOK
53	4	1/4" DIA. COTTER PIN X 2 LG.
54	5	3/16" DIA. COTTER PIN X 1/2 LG.

NO.	REVISION	BY	DATE
BALE STOOKER ARRANGEMENT DWG.			
WILLIAMSON MFG. LTD. REP. DEER ALBERTA 100-4-0001		100-4-0001	

NOTE: THIS DRAWING SHOWS
BALE STOOKER AS SET UP
FOR 14'x18' BALE.
TO SET UP FOR 16'x18' BALE
FOLLOW INSTRUCTIONS GIVEN
BELOW AT LOCATIONS
INDICATED THUS *

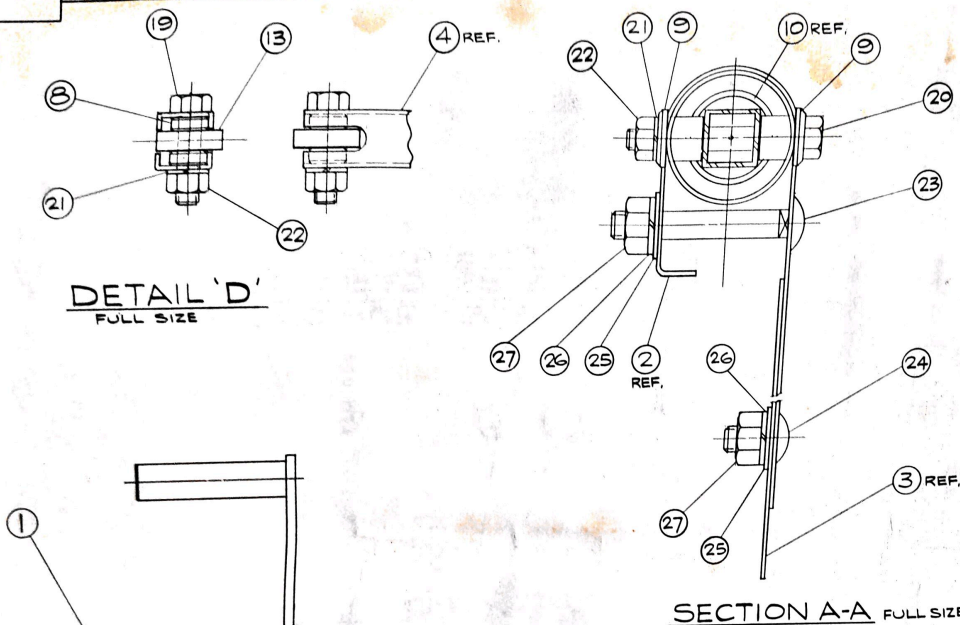


FASTEN HITCH USING
TWO BOLTS EACH SIDE.
DRILL HOLES INTO HITCH
SIDE PLATES LOCATING
THEM WITH AN EXISTING
HOLE PATTERN IN
BALER CHUTE
IF POSSIBLE.



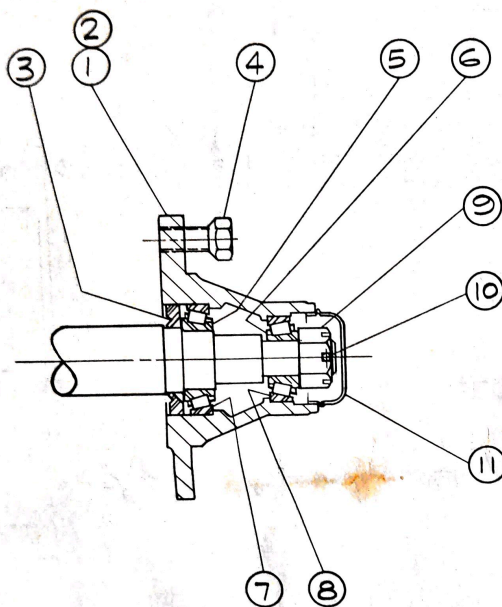
NO.	REVISION
BALE STOOKER SETTING-UP DATA	
DATE	17 JAN 73
SCALE	1/8" = 1"

ASSEMBLY
NO. 100-30041
JAN 73
C. S.



ITEM	QTY	PART NO.	DESCRIPTION
1	1	010-4-0005	SWINGING ARM WELDT
2	1	010-3-0008	BALE DEFLECTOR
3	1	010-2-0009	DEFLECTOR EXT.
4	1	010-3-0006	LATCH TUBE
5	1	010-2-0017	SLEEVE FOR STAR
6	1	010-2-0023	STAR
7	1	010-2-0024	REAR DISC
8	2	010-2-0028	SPACER
9	4	010-2-0027	GUIDE BUSHING
10	1	010-2-0020	SPRING
13	1		BEARING-SKF#608-2RS
14	2		EXTERNAL RETAINING RING 2" DIA. # 3100-200
15	1		MACHINERY BUSHING 1/2" DIA. X 1" IDIA. X 1 1/4" LG.
16	1		1/4" DIA. COTTER PIN X 2 3/4" LG.
17	1		3/32" DIA. COTTER PIN X 1" LG.
18	2		3/16" DIA. COTTER PIN X 1 1/2" LG.
19	1		5/16"-18 N.C. HEX. HD. BOLT X 1 1/4" LG.
20	2		5/16"-18 N.C. HEX. HD. BOLT X 2 1/2" LG.
21	3		5/16" STD. LOCK WASH.
22	3		5/16"-18 N.C. HEX. NUT
23	3		3/8"-16 N.C. CARRIAGE BOLT X 2 1/2" LG.
24	3		3/8"-16 N.C. CARRIAGE BOLT X 3/4" LG.
25	6		3/8" STD. FLAT WASH.
26	6		3/8" STD. LOCK WASH.
27	6		3/8"-16 N.C. HEX. NUT

NO.	REVISION	BY	DATE
<small>Unless otherwise specified - Unfinished Fractional Dimensions - ± .010 Finished Fractional Dimensions - ± .005, Finished Decimal Dimensions - ± .002</small>			
SWINGING ARM ASSEMBLY		WILLIAMSON MFG. LTD. RED DEER ALBERTA	
MAT. DESC. MAT. CODE DATE JAN. 73 DWN C.S. SCALE 1/4" = 1"		DRAWING NUMBER 010-3-0041	



OPTIONAL
HUB &
WHEEL
ASS'Y.

STANDARD
HUB &
WHEEL
ASS'Y.

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	5-BOLT	HUB - J6B
2	1	5-BOLT	WHEEL (NOT SHOWN) 15X500E
3	1		SEAL 1 1/2 SHAFT X 2 9/16 O.D.
4	5		WHEEL BOLT 1/2-20 N.F.
5	1		INNER CONE #LM4B54B
6	1		OUTER CONE #LM11949
7	1		INNER CUP #LM4B510
8	1		OUTER CUP #LM11910
9	1		3/4-16 N.F. HEX. SLOTTED NUT
10	1		5/32 DIA. COTTER PIN X 1 1/2 L.
11	1		DUST CAP FOR J6B HU
1	1	4-BOLT	HUB - H15-450 C.T.D.
2	1	4-BOLT	WHEEL (NOT SHOWN) 15X4.5" 541-4
3	1		SEAL #SE-11
4	4		WHEEL BOLT 1/2-20 N.F.
5	1		INNER CONE #LMG704B
6	1		OUTER CONE #LM11949
7	1		INNER CUP #LMG7010
8	1		OUTER CUP #LM11910
9	1		3/4-16 N.F. HEX. SLOTTED NUT
10	1		5/32 DIA. COTTER PIN X 1 1/2 LG.
11	1		DUST CAP #DC12

**NOTE: TWO HUB ASSEMBLIES
REQUIRED PER STOOKER.**
- WHEN ORDERING, INDICATE
WHETHER 5-BOLT OR 4-BOLT HUB ASS'Y;
AS THESE ARE NOT INTERCHANGEABLE.

NO.	REVISION	BY	DATE
<small>Unless otherwise specified - Unfinished Fractional Dimensions \pm 1/16 Finished Fractional Dimensions \pm 1/64; Finished Decimal Dimensions \pm .003</small>			
HUB & WHEEL ASSY.		WILLIAMSON MFG. LTD.	
MAT. DESC.		RED DEER ALBERTA	
MAT. CODE		DRAWING NUMBER	
DATE 16 JAN. 73		010-2-004	
SCALE		CHD.	

WILLIAMSON MANUFACTURING LTD.
R.R. No. 2, RED DEER, ALBERTA, CANADA, T4N 6E2

WARRANTY

The Company warrants its products to the original consumer (end-user) against defective material or workmanship and agrees to repair or replace without charge, F.O.B. factory at Red Deer, Alberta, any parts proving defective under normal use and service within one year from date of purchase by end-user. The Company will make no allowance for repairs or alterations unless same are authorized in writing by the Company and any claims for defective material or workmanship must be made within one year from date of purchase by end-user. This warranty limits the Company's liability solely to the cost of the replacement parts F.O.B. factory or at the option of the company to its cost of repairing the defective parts and no claim for damages, lost time or anything else will be recognized by the Company. The Company is the sole judge as to whether a part is defective or not.

Claims for alleged defective parts which have been altered or reworked by the customer will not be allowed unless such work has been authorized in writing by the Company.

Since there is no means of preventing materials in products from being stressed beyond the limit of endurance, any claim for failures which have resulted from overload or abnormal conditions will not be accepted by the Company .

Component parts or equipment manufactured by third parties are not covered by this warranty or any warranty, except to the extent that they may be covered by original manufacturer.

There are no other warranties or guarantees expressed or implied by the Company except as herein expressly set forth.